

NOTES ON THE HOSTS, HABITS AND DISTRIBUTION
OF OREGON ACMAEODERA
(Coleoptera, Buprestidae)

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This paper is a record of the *Acmaeodera* of Oregon, mainly collected by the writer during the past seven years. A majority of the species have been taken in the Rogue River Valley where they inhabit their usual hosts which encroach from the Sierra Nevada Range and adjoining foothills. The earlier records for the state are woefully incomplete, the species in reality occurring far more commonly and abundantly than previous reports would indicate. Dr. Chamberlin's¹ paper in 1929 was the last to report this genus and list new material actually taken by an Oregon collector. In his catalogue, Chamberlin² lists four species found in Oregon, and an additional one, *flavosticta*, as doubtful, while Barr³ lists five in his recent excellent resume.

After intensively collecting through the state the number of species has been increased to fourteen and two varieties, and the range of several materially extended. Since a large part of the collecting was done during the winter and early spring by cutting the adults from their pupal cells and a few having been reared from larvae, exact host plants can be given for the majority of the species. Though host plants may not in general be considered to have a great deal of significance, however, after much careful observation, the species have been consistently found inhabiting the same host plant or plants.

ACMAEODERA ACUTA LECONTE

This species is by far the most common collected in southwestern Oregon. It is generally found feeding on the flowers of *Eriophyllum lanatum* (Pursh) Forbes, a yellow composite occurring in the foothills of the Rogue River Valley and southward across the Siskiyou summit into California. The insect also oc-

¹ Chamberlin, W. J., 1929, Remarks of the Buprestidae of the North Pacific Coast Region with descriptions of new species, Pan-Pac. Ent., 5:111.

² Chamberlin, W. J., 1926, Catalogue of Buprestidae of North America.

³ Barr, W. F., 1941, Distribution of Acmeodera, Pan-Pac. Ent., 17:62-69.

curs in the Willamette Valley as occasional specimens have been taken on the blossoms of wild rose (*Rosa pisocarpa* Gary). The larvae mine the smaller dead branches and stems of the Garry oak (*Quercus garryana* Dougl.) from which adult specimens have been cut.

ACMAEODERA ANGELICA FALL

Numerous specimens of this little Buprestid have been taken in southwestern Oregon, most of them beaten from the foliage or dug from dead wood scars of buckbrush (*Ceanothus cuneatus* Nutt.), though a few have been cut from dead branches of California black oak (*Quercus californica* [Torr.] Coop.)

The variety *nexa* Fall occurs through the same region and has been taken from buckbrush. Recently a specimen was reared from mountain mahogany (*Cercocarpus betuloides* Hook.).

ACMAEODERA BISHOPIANA FALL

The only record we have of this species is of three specimens taken by Mr. M. C. Lane at Adrain, Oregon, on May 28, and reported by Dr. W. J. Chamberlin⁴. It apparently occurs throughout the Great Basin region, as the original specimens came from Owen's Valley, California, and the writer has specimens reared from the Walker Lake region in Nevada. The host in its southern range is the wingscale (*Atriplex canescens* [Pursh] Nutt.). This plant extends northward into Oregon.

ACMAEODERA CONNEXA FALL

This species occurs commonly through the southwestern part of the state wherever the host plant is found. Many adult specimens and numerous larvae have been dug from the scars and dead trunks of the Garry oak (*Quercus garryana* Dougl.). During June, it can be taken on one of the willow herbs (*Epilobium* sp.) and occasionally on the composite, *Eriophyllum lanatum* (Pursh) Forbes.

ACMAEODERA FENYESI FALL

This uncommon form has not previously been recorded from the state and to my knowledge the host plant has not been reported. The species is apparently quite rare in our range as

⁴ Chamberlin, W. J., 1929, Pan-Pac. Ent., 5:111.

literally days of cutting through manzanita (*Arctostaphylos viscida* Parry) has produced only seven specimens. These are somewhat larger than specimens from southern California, and one female is noticeably more maculate. All specimens have been taken from the foothills of the Rogue River Valley.

ACMAEODERA GEMINA HORN

Though this species is never taken in abundance, it is occasionally found feeding on several varieties of flowers or is swept from grass. Careful search over several years has not revealed its host. The species has been taken from the floor of the Rogue River Valley to the high mountains in the vicinity of Crater Lake.

The variety *nebulosa* Horn is apparently rare in this region, as only one specimen has been taken, that from near Crater Lake.

ACMAEODERA HEPBURNI LECONTE

This is another common species which has a wide range of distribution. It is found throughout the foothills of southwestern Oregon where its larvae infest the Garry oak (*Quercus garryana* Dougl.). It is also taken abundantly on the flowers of the composite *Eriophyllum lanatum* (Pursh) Forbes, along with *acuta*, *connexa* and *labyrinthica*.

ACMAEODERA LABYRINTHICA FALL

Many specimens of this beautiful species were collected in the Siskiyou Mountains of southern Oregon, the specimens being most numerous on the upper Applegate in the vicinity of Copper, Jackson County, near the Oregon-California line. Two specimens were dug from dead scar tissue of living Garry oaks (*Quercus garryana* Dougl.). In early June many specimens were taken feeding on the blossoms of *Eriophyllum lanatum* (Pursh) Forbes. This species is considered as distinct by some writers and as a variety of *connexa* or *acuta* by others. However, in any series it can be easily distinguished by its breadth and bronze lustre. In the last respect it more closely resembles *hepburni*, from which it differs by the shape of the pronotum and the emargination of the prosternum.

A rather interesting observation was made upon the group *acuta*, *connexa*, *hepburni* and *labyrinthica* which would seem worthy of mention. Numerous specimens of *labyrinthica* with lesser numbers of *acuta*, *connexa* and *hepburni* were observed on

three occasions while they were feeding on the previously mentioned yellow composites. During this time numerous pairs were seen mating, but at no time did specimens outside the species succeed in copulating, though occasional attempts were made. Although the four species are distinctive enough to be separated on external features, this bit of information lends more proof to the belief that there are four distinct species.

ACMAEODERA MARIPOSA HORN

This distinctive species is not abundant, but a couple of dozen specimens have been taken. About one-half of them have been dug from their pupal cells in mountain mahogany (*Cercocarpus betuloides* Hook.) where they work through dead trunks or through dead patches in living trees. During the spring of 1940, several specimens were swept from the foliage of antelope brush (*Purschia tridentata* [Pursh.] D. C.) on Roxy Anne Butte, five miles east of Medford, Jackson County, Oregon. All specimens have been taken on or near the floor of the Rogue River Valley, none apparently occurring above 2500 feet elevation.

ACMAEODERA PLAGIATICAUDA HORN

Because this species is seldom obtained while sweeping it is considered rare. After learning the habits of the larvae, and collecting accordingly, recently transformed adults are quite easily obtained by cutting through the dead patches of manzanita (*Arctostaphylos viscida* Parry). It ranges over most of southwestern Oregon, extending as far north as Azalea, Douglas County.

ACMAEODERA PURSCHIAE FISHER

This species was first found in the state near Medford, Jackson County, where two specimens were cut from antelope brush (*Purschia tridentata* Pursh.). On June 12, 1940, about thirty specimens were taken while sweeping the host plants on Roxy Anne Butte, Jackson County. Previously, five specimens had been cut from the host plant at the base of Mount Shasta, near Weed, Siskiyou County, California. The range of this species is thus extended northward by several hundred miles and into a third state.

ACMAEODERA SINUATA VAR. SEXNOTATA VAN DYKE

Numerous specimens of this beautiful variety have been collected, all having been dug or swept from buckbrush (*Ceanothus cuneatus* Nutt.). They range over most of southwestern Oregon, especially through the Siskiyou Mountains. No examples of the species *sinuata* Van Dyke have as yet been taken.

ACMAEODERA VANDYKEI FALL

This widely distributed species has seldom been found in its pupal cell. It is not common but is found throughout the portion of the state where the deer brush (*Ceanothus integerrimus* H. & A.) occurs. One specimen was also taken from sticky laurel (*Ceanothus velutinus* Dougl.), which must also be listed as a host plant. Specimens have been taken in the Wallowa and Blue Mountains of northeastern Oregon, Hood River County, and south along the eastern slope of the Cascade Range, and across into the Rogue River Valley and the adjoining foothills.

ACMAEODERA VARIGATA LECONTE

This species has the widest distribution in the state. Specimens have been taken from the following Oregon counties: Douglas, Grant, Hood River, Jackson, Josephine, Klamath, Lake and Wheeler. The specimens have been cut from two species of mountain mahogany (*Cerocarpus betuloides* Hook. and *C. ledifolius* Nutt.) and from service berry (*Amalanchier* sp.) and are generally found above 3000 feet in elevation. Two variations are noticeable, the specimens cut from service berry are smaller and the specimens taken near Glendale, Douglas County, are more abundantly maculate.

I am indebted to Mr. James H. Baker of Baker, Oregon, for permission to include a series of fourteen specimens of *A. variegata* Lec. from his collection. Nine of these were taken near Baker, Baker County, the other five were collected at Hiatt Lake, Jackson County. His series, which is typical, thus extends the species into the northeastern corner of the state.